

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims:

1. (Original) An alkaloid formulation comprising the reaction product of one or more alkaloids with one or more phosphate derivatives of one or more electron transfer agents.
2. (Currently amended) The alkaloid formulation ~~according to claim 1~~ of claim 1, wherein the ~~one or more phosphate derivative of a electron transfer agent is selected from the group comprising one or more phosphate derivatives~~ derivatives is a phosphate derivative of tocopherol.
3. (Currently amended) The alkaloid formulation ~~according to claim 1~~ of claim 1, wherein the formulation is a topical formulation.
4. (Currently amended) The alkaloid formulation ~~according to claim 1~~ of claim 1, wherein the formulation is an oral formulation.
5. (Currently amended) The alkaloid formulation ~~according to claim 4~~ of claim 4, further comprising an enteric coating.
6. (Currently amended) The alkaloid formulation ~~according to claim 4~~ of claim 4, wherein the formulation is selected from the group consisting of tablets, powders, chewable tablets, capsules, oral suspensions, suspensions, emulsions or fluids, children's formulations, enteral feeds, nutraceuticals, and functional foods.

7. (Currently amended) The alkaloid formulation ~~according to claim 4 of claim 1,~~
wherein the formulation is a buccal formulation.

8. (Currently amended) The alkaloid formulation ~~according to claim 4 of claim 1,~~
wherein the electron transfer agent is selected from the group consisting of hydroxyl chromans
including ~~alpha, beta, gamma and delta~~ tocopherols in enantiomeric and racemic forms; quinols
being the reduced forms of vitamin K1 and ubiquinone; hydroxy carotenoids including ~~retinol;~~
calciferol; ascorbic acid and mixtures thereof.

9. (Currently amended) The alkaloid formulation ~~according to claim 8 of claim 8,~~
wherein the electron transfer agent is selected from the group consisting of tocopherol and other
tocopherols, retinol, vitamin K1 and mixtures thereof.

10. (Currently amended) The alkaloid formulation ~~according to claim 9 of claim 9,~~
wherein the electron transfer agent is selected from the group consisting of the tocopherols and
mixtures thereof.

11. (Currently amended) The alkaloid formulation ~~according to claim 10 of claim 10,~~
wherein the electron transfer agent is α -tocopherol.

12. (Currently amended) The alkaloid formulation ~~according to claim 11 of claim 11,~~
wherein the one or more phosphate derivatives of one or more electron transfer agents is selected
from the group consisting of mono-tocopherol phosphate; di-tocopherol ~~phosphate phosphate;~~
and mixtures thereof.

13. (Currently amended) The alkaloid formulation ~~according to claim 12 of claim 12,~~
wherein the one or more phosphate derivatives of one or more electron transfer agents is a
mixture of mono-tocopherol phosphate and di-tocopherol phosphate.

14. (Currently amended) The alkaloid formulation ~~according to claim 1 of claim 1,~~ wherein the one or more phosphate derivatives of one or more electron transfer agents is a phosphatide.

15. (Currently amended) The alkaloid formulation ~~according to claim 1 of claim 1,~~ wherein the ~~alkaloid is~~ one or more alkaloids are selected from the group consisting of tertiary amines which are alicyclic with the nitrogen atom as a common member of three rings; are cyclic where the nitrogen is incorporated into a single ring and alkylated; or have no cyclic structure incorporating the nitrogen; and mixtures thereof.

16. (Currently amended) The alkaloid formulation ~~according to claim 15 of claim 15,~~ wherein the ~~alkaloid is~~ one or more alkaloids are selected from the group consisting of atropine, quinine, opioids, fentanyl, nicotine, fenspiride, flurazepan and codeine.

17. (Currently amended) The alkaloid formulation ~~according to claim 1 of claim 1,~~ wherein the ~~alkaloid is~~ one or more alkaloids is the alkaloid atropine.

18. (Currently amended) The alkaloid formulation ~~according to claim 1 of claim 1,~~ wherein the ~~alkaloid is~~ one or more alkaloids is the alkaloid morphine.

19-20, (Canceled)

21. (Original) A pharmaceutical composition comprising the reaction product of one or more alkaloids with one or more phosphate derivatives of one or more electron transfer agents.

22. (Currently amended) A ~~The~~ The pharmaceutical composition ~~according to claim 21 of claim 21,~~ wherein the electron transfer agent is tocopherol.

23. (New) The alkaloid formulation of claim 8, wherein the hydroxyl chromans is an alpha, beta, gamma or delta tocol present in enantiomeric or racemic forms.

24. (New) The alkaloid formulation of claim 8, wherein the hydroxy carotenoid is a retinol.